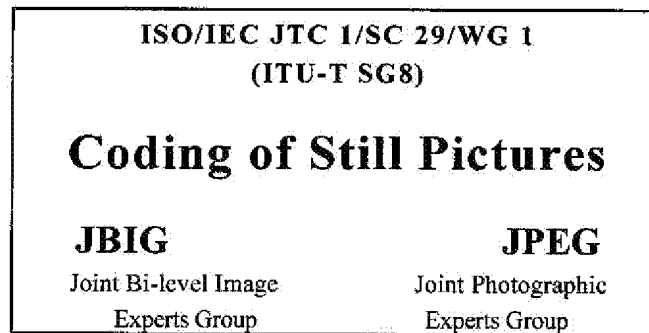


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marker segment: A marker and associated set of parameters.

mod: $\text{mod}(y,x) = z$, where z is an integer such that $0 \leq z < x$, and such that $y-z$ is a multiple of x .

packet: A part of the bit stream comprising a packet header and the coded data from one layer of one decomposition level of one component of a tile.

packet header: Portion of the packet that describes the layer, decomposition level, component, and the code-block segment lengths.

packet partition: A division of one tile-component by a rectangular grid. One packet partition size is specified for each resolution level.

packet partition location: One rectangular region of a packet partition.

pointer markers and marker segments: Markers and marker segments that offer information about the location of structures in the codestream.

precinct: A sub-division of a tile-component, within a each resolution, used for limiting the size of packets.

precision: Number of bits allocated to a particular sample, coefficient, or other binary numerical representation.

progressive: The order of a codestream where the decoding of each successive bit contributes to a “better” reconstruction of the image. What metrics make the reconstruction “better” is a function of the application. Some examples of progression are increasing resolution or improved pixel fidelity.

quantization: A method of reducing the precision of the individual coefficients to reduce the number of bits used to entropy code them.

raster order: A particular sequential order of data of any type within an array. The raster order starts with the top left data point and moves to the immediate right data point, and so on, to the end of the line. After the end of the line is reached the next data point in the sequence is the left-most data point immediately below the current line. This order is continued to the end of the array.

reconstructed image (data): An image, that is the output of a decoder.

reconstructed sample (value): The sample value reconstructed by the decoder. This always equals the original sample value in lossless coding but may differ from the original sample value in lossy coding.

reference grid: A regular rectangular array of points to which images, components, tiles, sub-bands, etc. are associated. Reference grid units or points are used to describe the mapping of the tiles and the components.

reference tile: A rectangular sub-grid of any size associated with the reference grid.

region of interest (ROI): A defined area of the image, component, or tile-component that is considered of particular relevance by some user defined measure.

resolution: The spatial mapping of samples to a physical space. In this Recommendation | International Standard the decomposition levels of the wavelet transform relate to each other with relative resolutions differing by powers of two.

reversible: A transformation, progression, system, or quantization that does not suffer systemic or quantization error and, therefore, allows lossless signal recovery. The result of reversible process may be lossy or lossless depending on the quantization and other factors in the system.

sample: One element in the two-dimensional array that comprises a component.

segmentation symbol: A special symbol coded with a uniform context at the end of each coding pass for error resilience.

selective arithmetic coding bypass: A coding style where some of the code-block passes are not coded by the arithmetic coder.

shift: Multiplication or division of a binary number by factors of two.